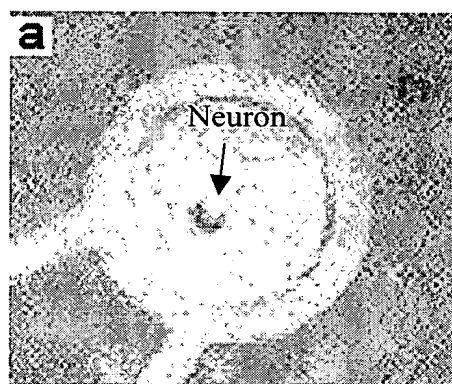
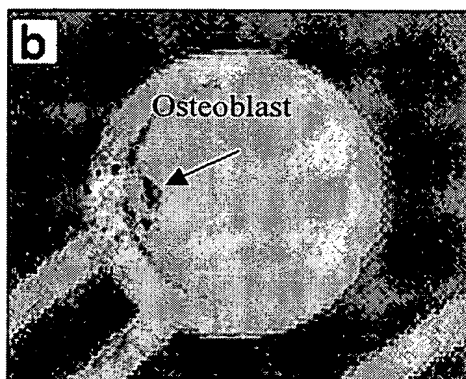


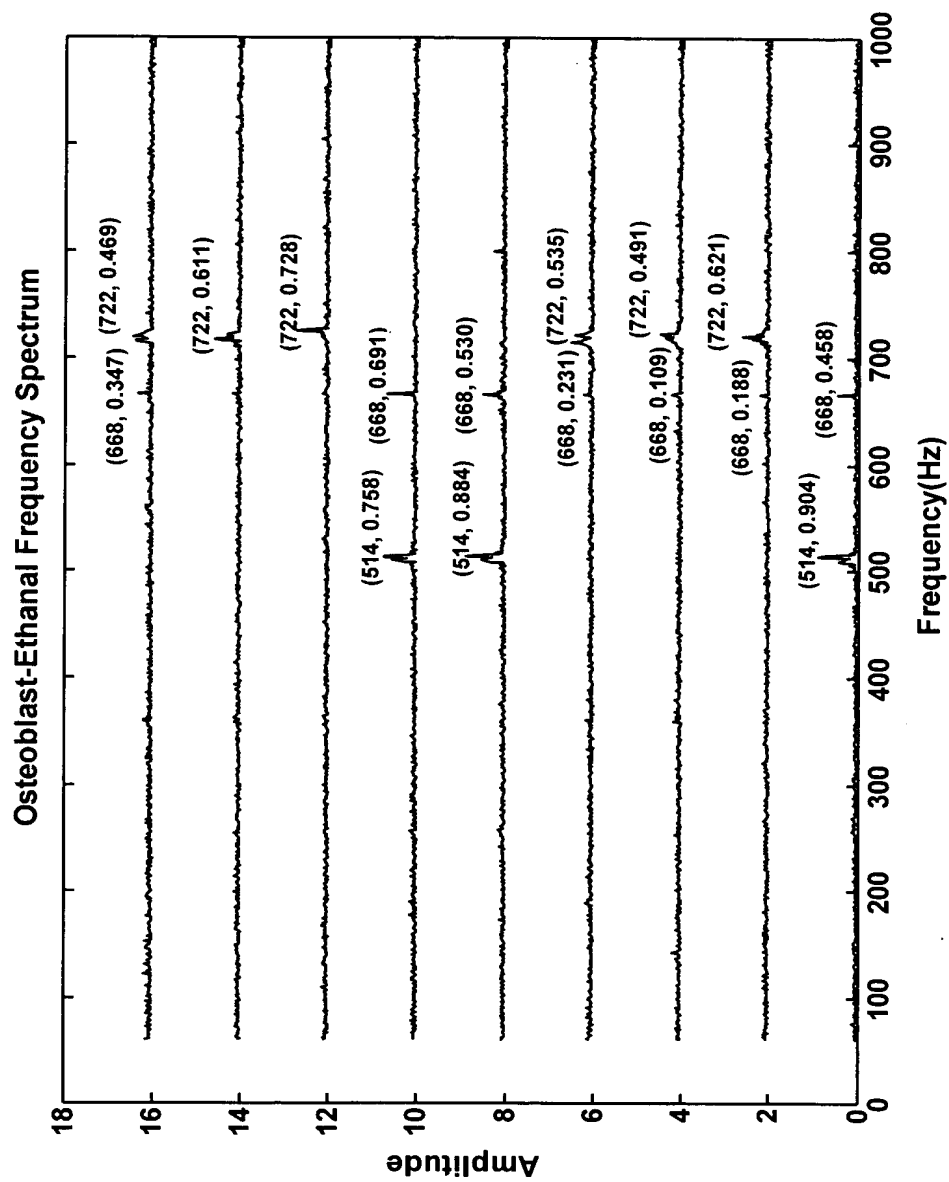
**Figure 1**



**Figure 2A**



**Figure 2B**

**Figure 3**

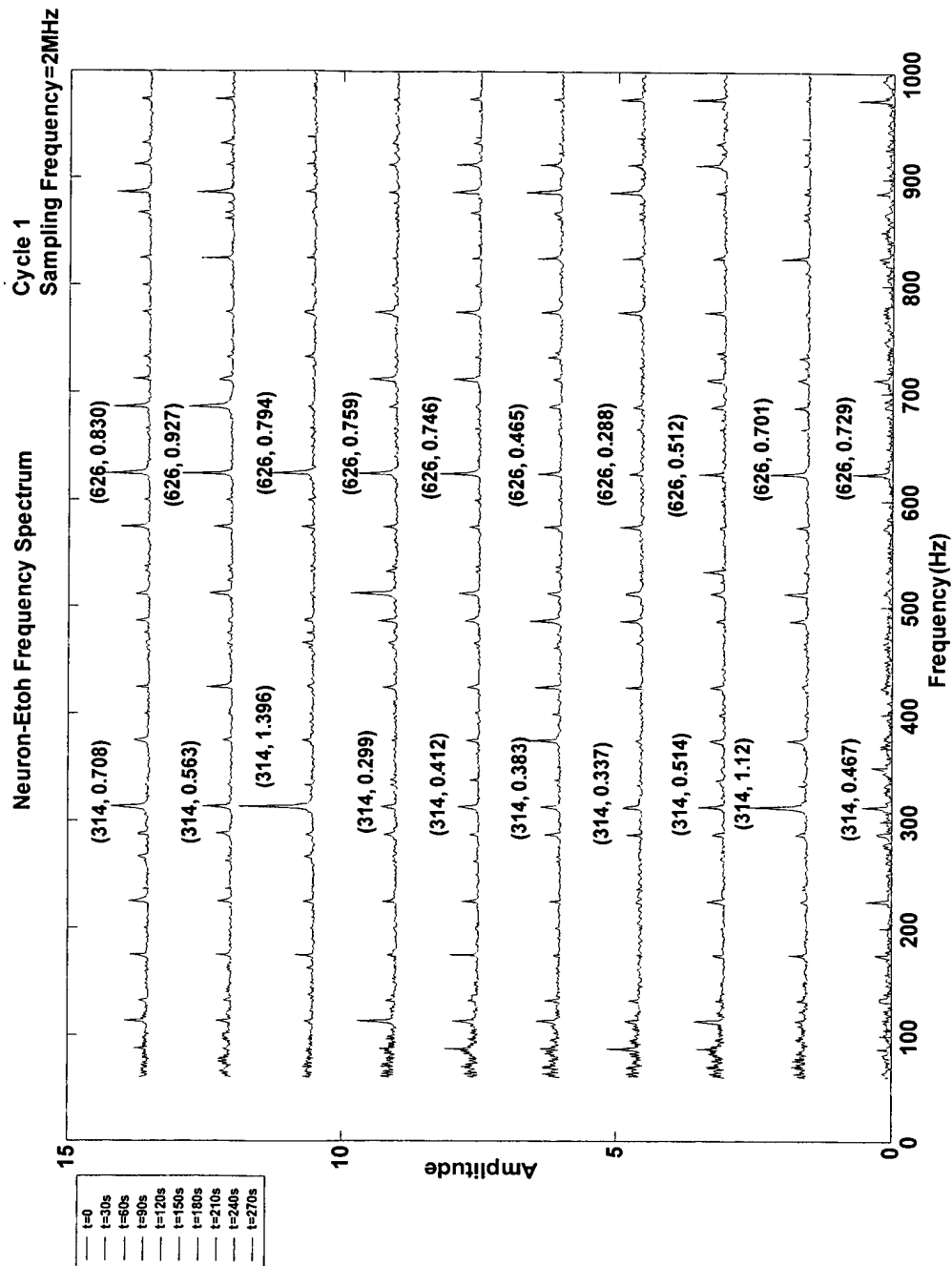


Figure 4

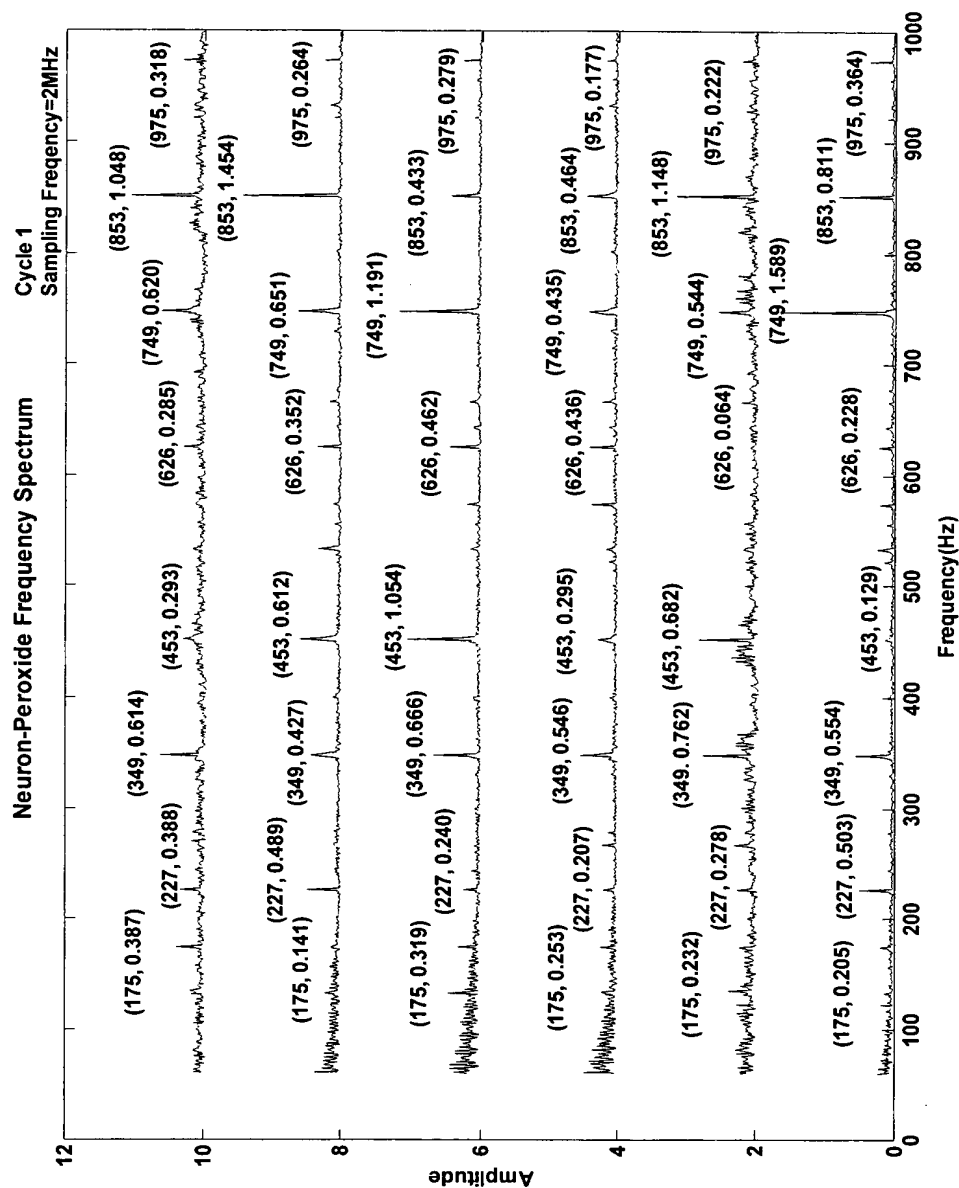


Figure 5

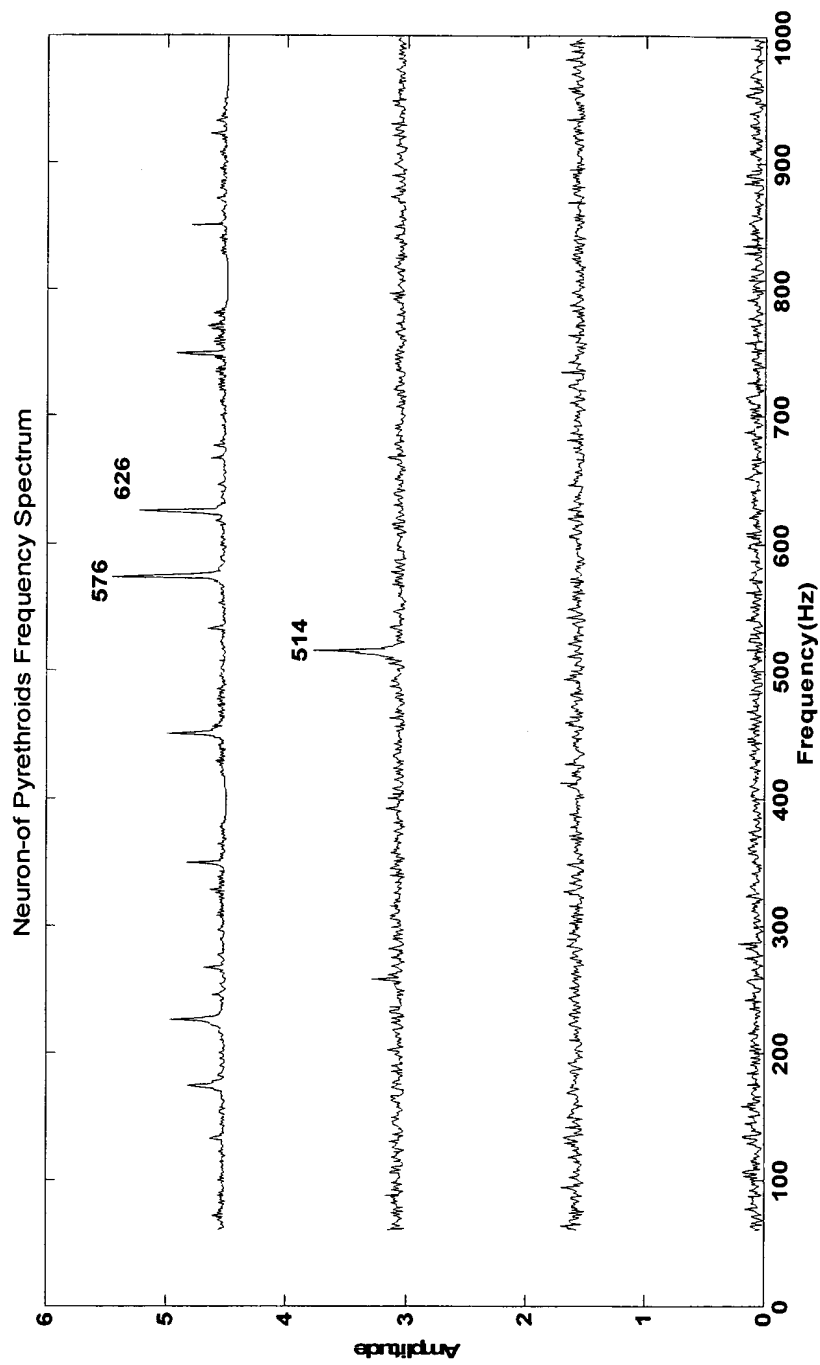


Figure 6

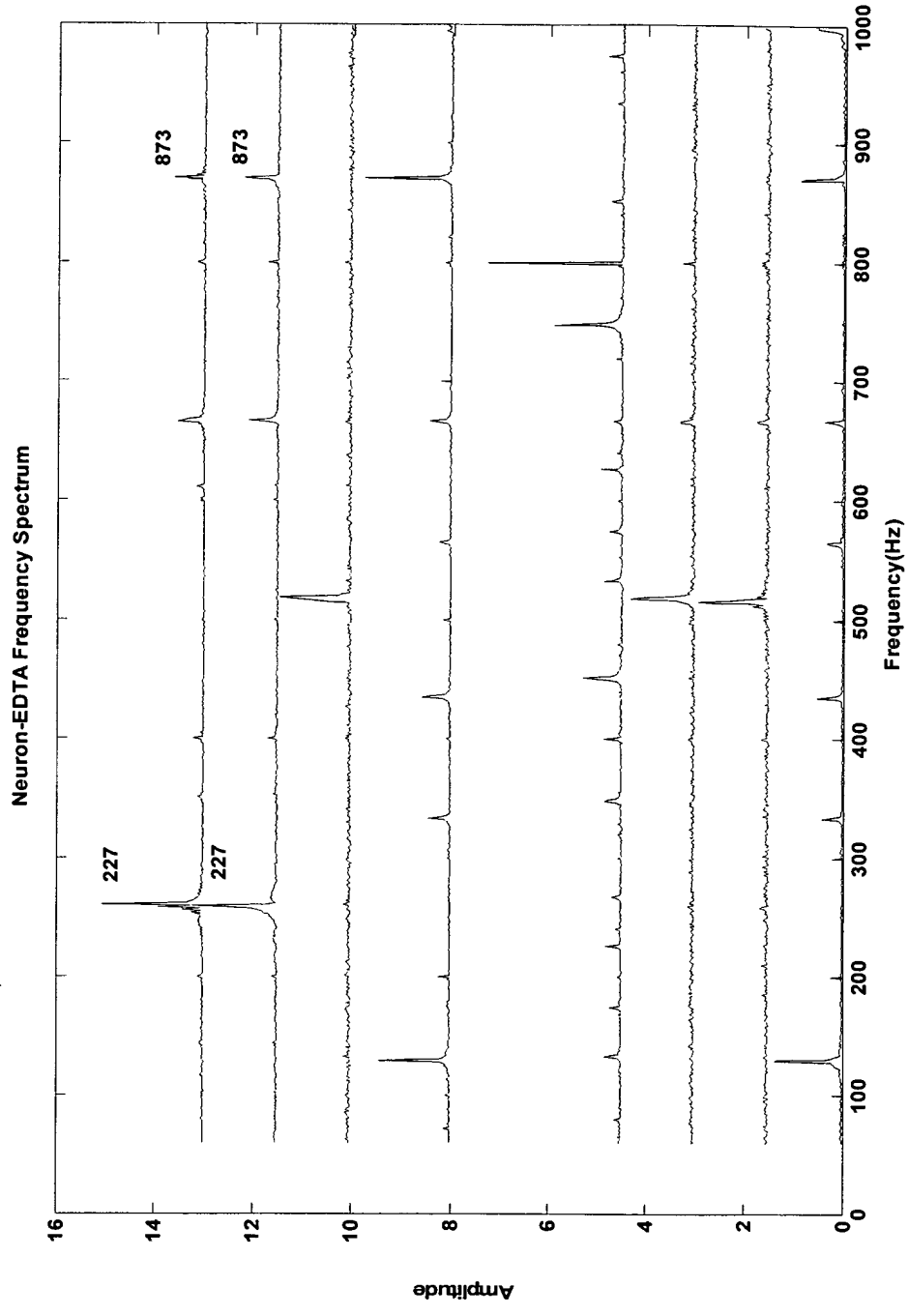
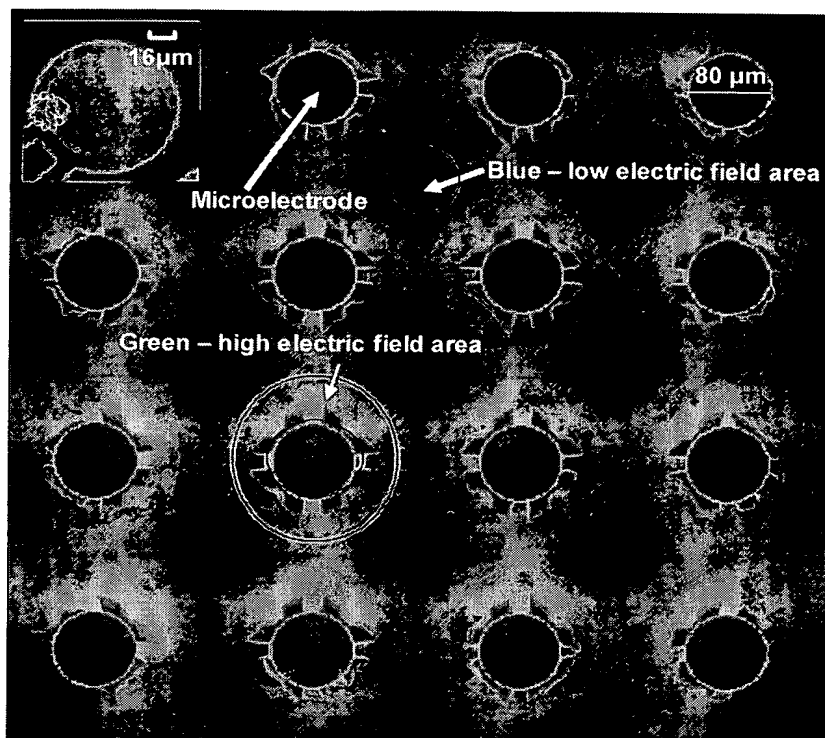
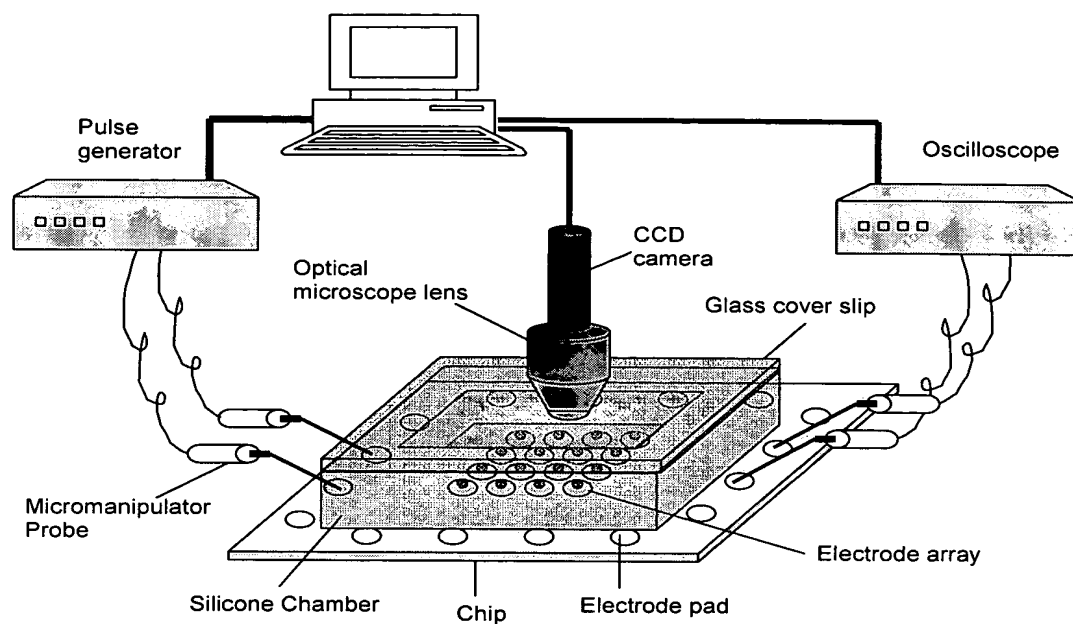
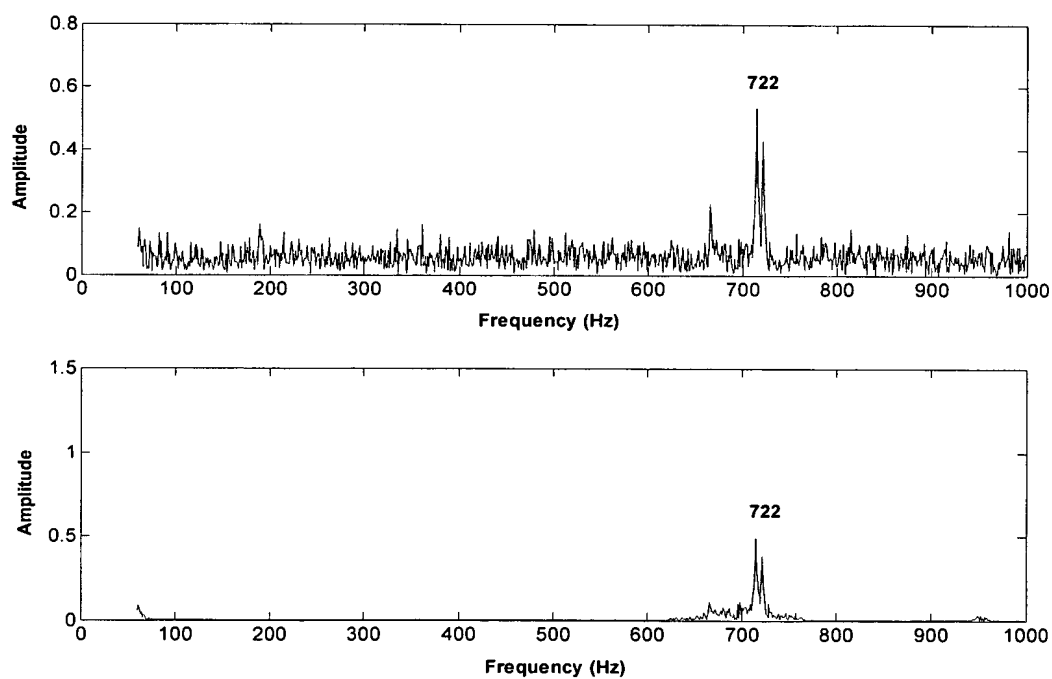


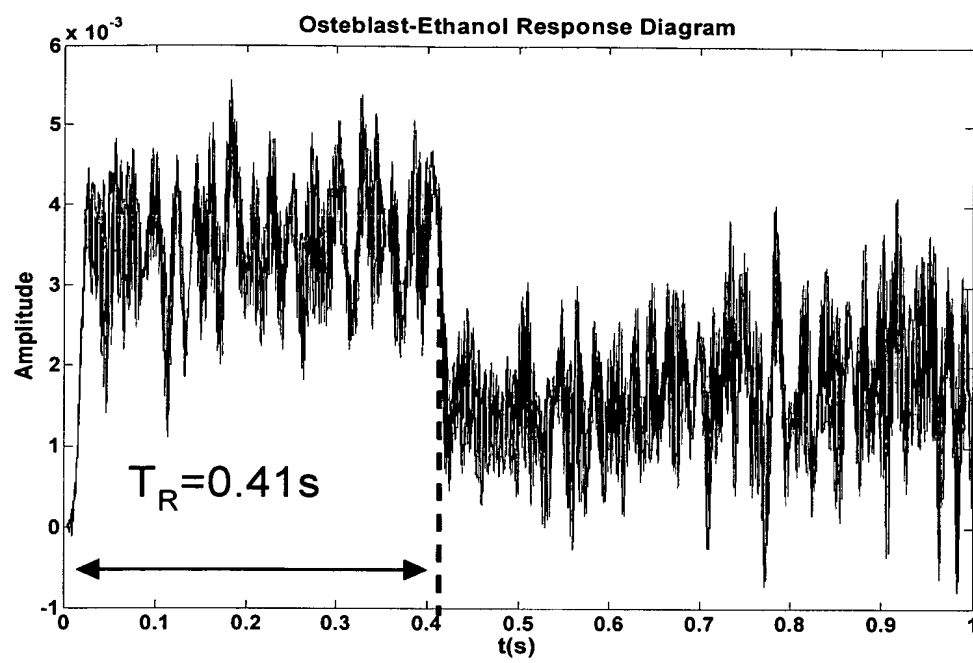
Figure 7

**Figure 8**

**Figure 9****Figure 10A**



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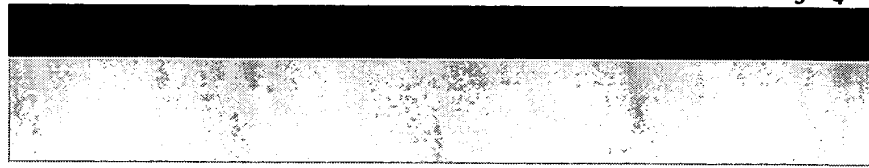


**Figure 10B**

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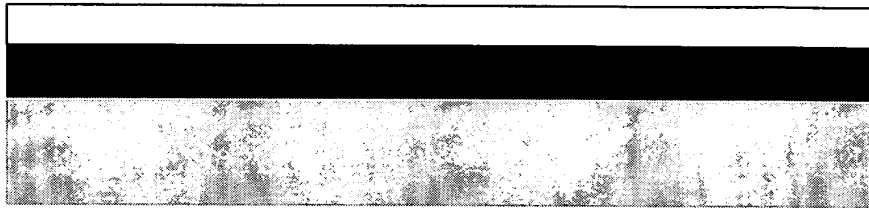
**A. PECVD Silicon nitride deposition**

$\text{Si}_3\text{N}_4$



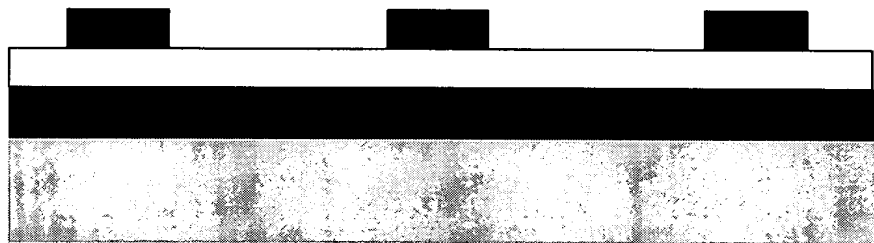
**B. E-beam platinum deposition**

Pt

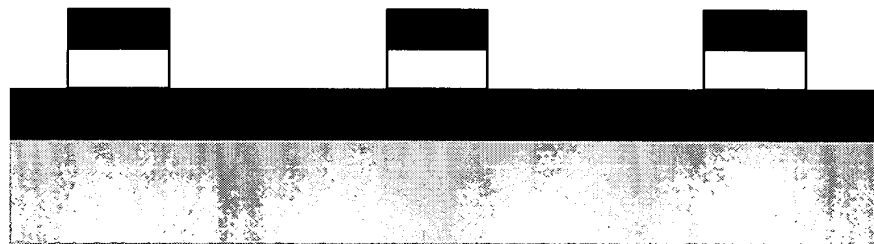


**C. Photoresist patterning**

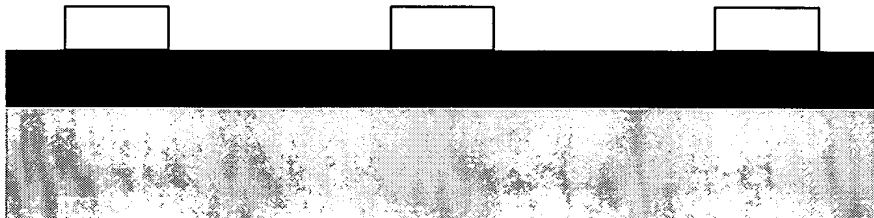
Photoresist



**D. PECVD Silicon nitride deposition**



**E. Photoresist removal**



**Figure 11**

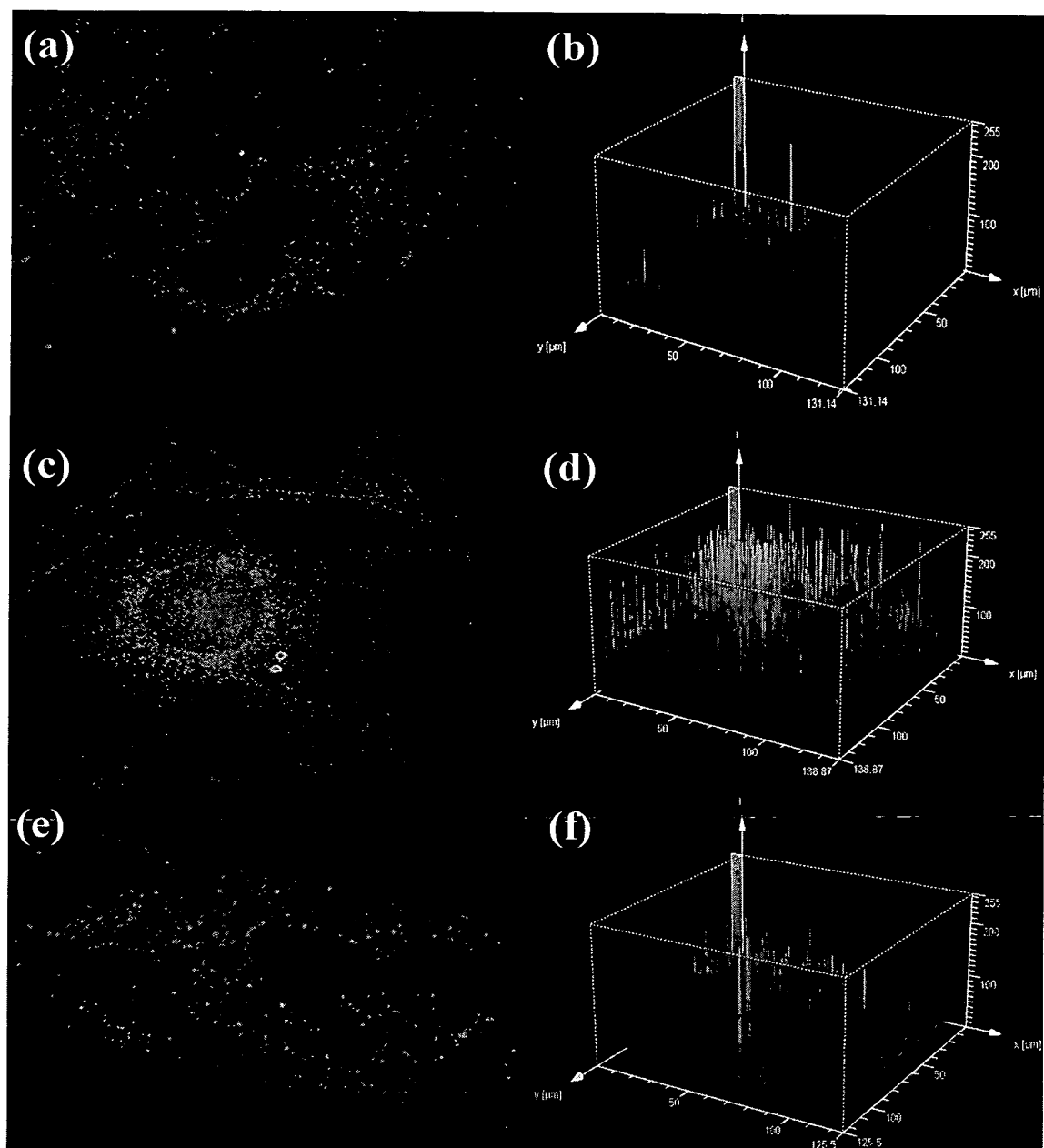


Figure 12

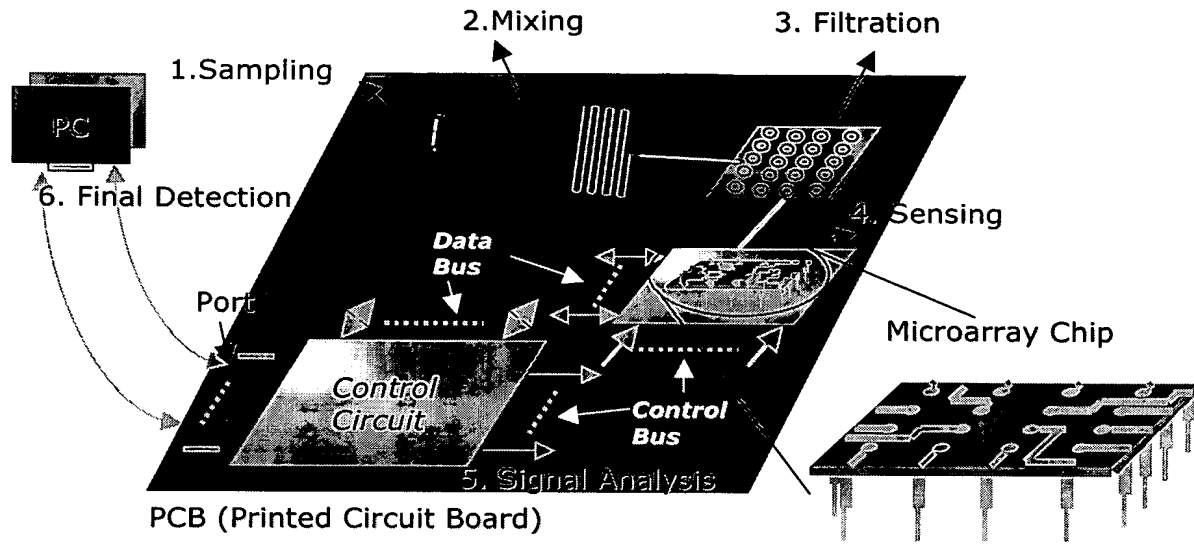


Figure 13

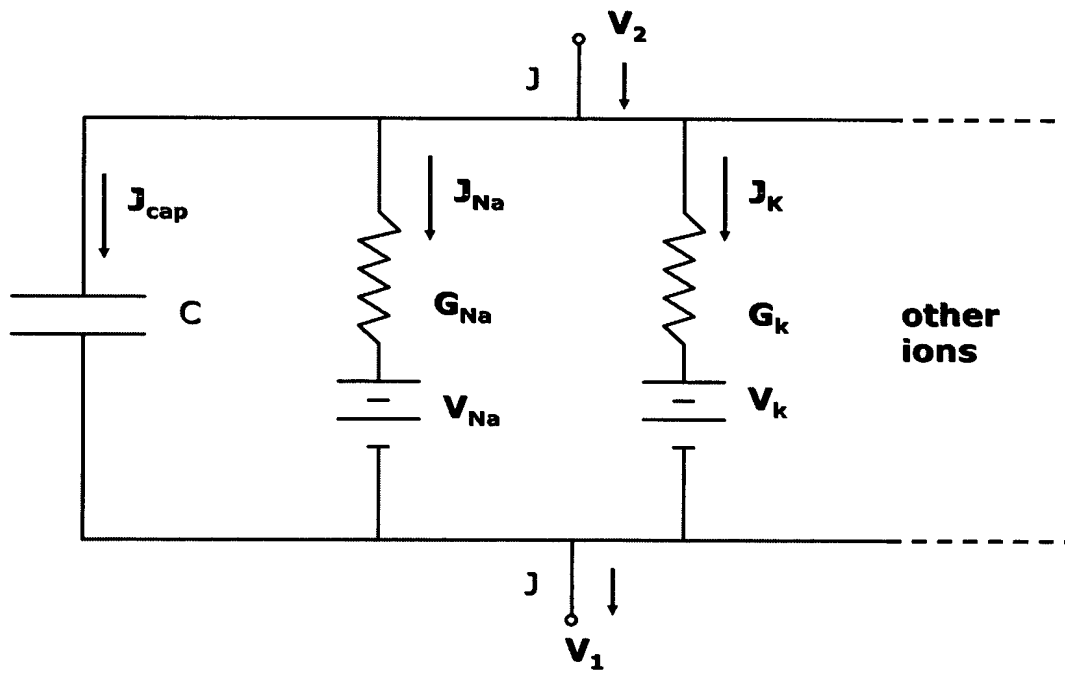


Figure 14

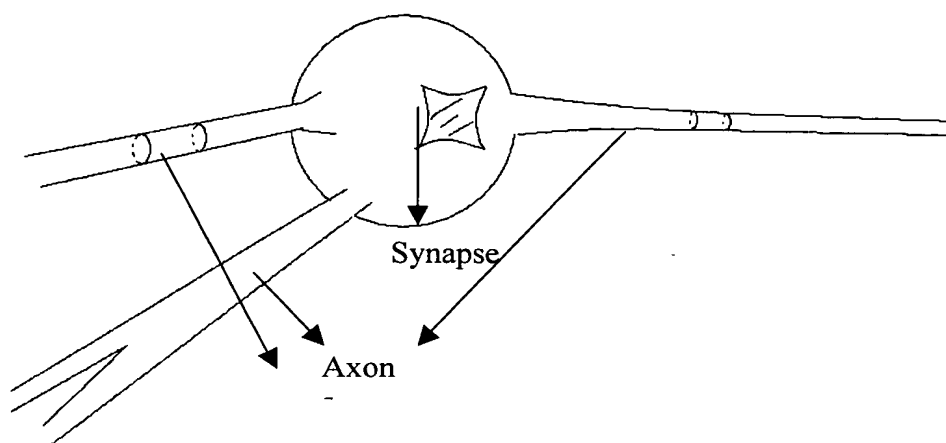


Figure 15A

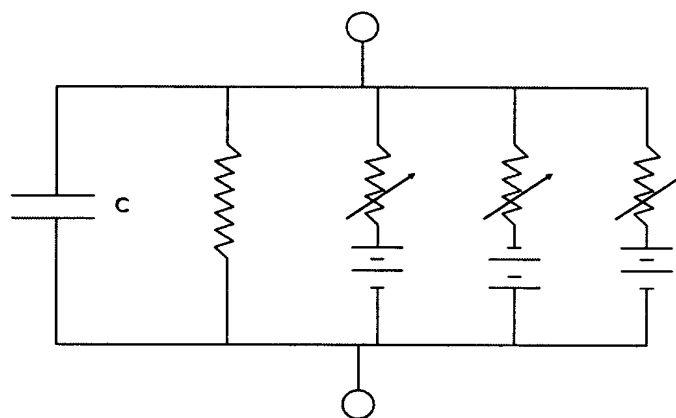


Figure 15B